

20 December 2002

CEMVN-ED-S

MEMORANDUM FOR : Engineering Division, Branch Chiefs,  
Section Chiefs, Functional Team Leaders  
(FTLs) and Technical Managers

SUBJECT: Vertical Datum Policy

1. It is the policy of Engineering Division to use the NAVD88 datum for all vertical control and for gages, for engineering studies, design and construction documents and for the reporting of all levels of protection, etc. All new work shall be requested in NAVD88.
2. The Survey Section shall not sanction mathematical conversions to the NAVD88 datum from permanent benchmark elevations published in the NGVD29 datum. Prior to any field data collection effort either in-house, through contracts, by sponsors or their AEs, the project shall fund to validate benchmarks and to establish vertical controls in the project area.
3. Historic data to include topographic and hydrographic surveys, flowlines, hydrologic data, benchmarks, map elevation contours, and all such field information collected using non-NAVD88 datums is suspect and cannot easily be used in conjunction with current NAVD88 data. No meaningful conversion between old datums and NAVD88 is possible without proper field investigations and even then could result in an approximation at best. Therefore, Survey Section will be consulted for each instance of attempted use of historic data. The degree of their involvement will depend on the purpose for which the data is to be used and the acceptable magnitude of error. As a minimum, a quick validation of the vicinity benchmark elevation without cost to the project is required to determine the magnitude of the problem.
4. It is recognized that some interim exceptions to this policy may be necessary. These should be expressly approved by the Chief, Engineering Division.
5. To ensure adherence to proper surveying practices, the use of acceptable benchmarks and their assigned values, and the conformance of the data to Corps standards and datums, all planned field surveying effort shall be reviewed by the Chief, Surveying Section. This includes the field data gathering effort performed by District design and planning AE contractors, sponsors, and the sponsor's AE contractors.

6. Plans and specifications shall identify the permanent benchmarks and their assigned elevations to be used for each construction contract. It will be incumbent upon the design engineer to assure that all designs and data are compatible with the elevations assigned to the permanent benchmarks used in the contract documents.

7. It is the intent of this policy that the assigned benchmark elevations represent a "snapshot", and may change on future contracts depending on benchmark movement. Engineers must use sound engineering judgment in employing the NAVD88 datum, recognizing that projects have already been designed and/or constructed using the NGVD29 datum against various epochs and that projects may require a significant number of years from conception to completion, and therefore allowances must be made for vertical movement.

2. Survey Section personnel, in conjunction with the District benchmarks as they are needed in various design projects, shall use the use of the Engineering Division's Engineering Division (CEM) as a reference point for all design projects. The CEM will allow us to ensure accuracy, reduce errors, and provide a clear and concise record of all design projects.

/s/  
GERARD S. SATTERLEE, Jr.  
Chief, Engineering Division

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